

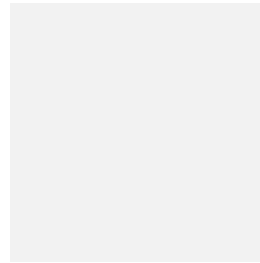
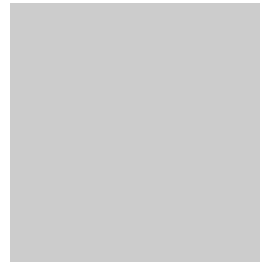
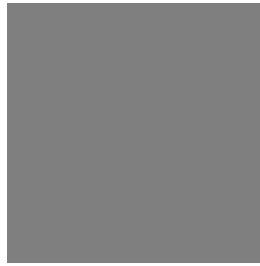


**VISITOR ATTRACTIONS UNITE  
RESPONDING TO COVID-19 WHITEPAPER**

**LEADING IN CRISIS:  
SURVIVE THEN THRIVE**

**APRIL 2020**





# Introduction

The visitor attractions sector is experiencing growing economic impact from COVID-19, which in the light of indefinite shutdowns, threatens to devastate many operators. Following the World Health Organization's pandemic status announcement on the 12th March 2020, then sweeping closures of cultural and commercial venues worldwide, visitor attractions are now managing unprecedented business continuity situations, making significant resource cuts and will soon recognize the need for dramatically different strategic plans. Like travel and tourism, the experience industry is the canary in the coalmine for an inevitable global recession already taking hold in many economies.

This whitepaper analyzes the impacts of the COVID-19 health and economic crisis for the visitor attractions sector, documents its

response and provides attractions professionals with guidance on how to lead in these extreme circumstances.

*This information does not represent health, financial or legal advice. Due to the unprecedented and unimaginable situation of COVID-19, this paper makes an informed best guess at how the future will unfold. Figures and facts referenced are correct at the time of publishing, Tuesday 14<sup>th</sup> April 2020.*



**For additional resources, including a webinar with the American Alliance of Museums, IAAPA and Blooloop on responding to COVID-19, visit [dexibit.com/covid19](https://dexibit.com/covid19)**

# Industry observations under COVID-19

The pandemic has affected billions of people, overwhelming health systems and economies while changing the fabric of society and foreign affairs under heavy government control globally. Within two short weeks of the pandemic announcement at 100,000 cases, the global verified caseload had increased fivefold, with some estimates putting the actual number of unconfirmed cases several times higher, based on death rates alone. In addition to the loss of human life and inundation of healthcare infrastructure, COVID-19 has inflicted devastating economic effects with tumbling stocks and rocketing unemployment.

With countries closing borders and imposing restrictions on citizens, public places have been ordered shut or led to close through dwindling visitorship. Original estimates of COVID-19's profound effects on the tourism industry suggested a 25% market shrink for 2020 with 50 million jobs lost<sup>1</sup>, a figure which now appears optimistic.

Relatedly, COVID-19 has impacted visitor attractions, with nearly every venue in the world closing their doors to the public.

As these developments took place, impacting firstly tourism from China, then Europe, then all audiences, initial Dexibit analysis suggest COVID-19 had a 5% - 15% impact on visitation and revenue in February for tourism exposed attractions outside of Asia, growing to 20% - 50% in the first week of March, then reaching a staggering 85%

or more for most venues before they closed to the public through mid month.

Some venues originally chose to nominate an opening date, many starting with end March, a hope which quickly became obsolete. Others left closure as indefinite, with initial industry chatter from March looking to July as a probable open date and October as a worst case scenario. Faced with the absence of earned income for a quarter or more, combined with growing concerns around funding, donations or endowment, many have been led to the difficult decisions of scaling down.

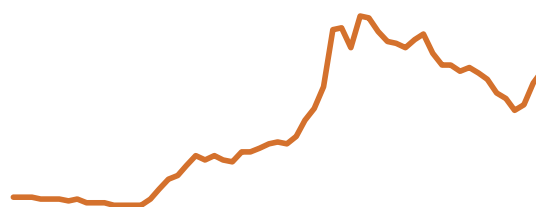
<sup>1</sup>World Travel and Tourism Council (WTTC), 2020

While COVID-19's impact is probably the single most significant global event for this industry, there is hope and evidence of successful containment strategies coming from Asia, in countries such as China, Taiwan, Hong Kong, Singapore and South Korea. Some have cautiously reopened visitor attractions under new restrictions, set against the reality of rolling shutdowns as governments continue to monitor and contain subsequent outbreaks. Outside of Asia, countries where government response and resources have been deployed to differentially affect containment have hope to achieve control faster, with less long term economic response<sup>2</sup>.

This pandemic preparedness includes leveraged epidemiological expertise, broadcasted public service announcements on hygiene and physical distancing, clear communication, early detection, early mandatory travel restrictions, forced isolation for the general public and early preparation of health systems. In such regions, reasonably safe soft domestic openings are a real possibility for attractions in a quarter, based on the experience in Asia. In other regions, the future of public life is uncertain in the wake of a deeper, sharper health crisis which will leave governments to resort to strategies such as long term shutdowns, certified recovered return or in the face of economic pressure, harsh herd immunity or rollercoaster curves.

The success of openings will equally be about visitor behavior relating to public confidence as government control. Since the announcement of the pandemic, public engagement and concern about COVID-19 has intensified. Worldwide, Google searches and media mentions for Coronavirus has increased exponentially.

### Google searches for Coronavirus worldwide



Anxiety and mental health issues have also been on the rise, fueled further by the pressures of quarantine. Internationally, events such as 9/11 in New York, the tsunami and resulting nuclear fallout in Tokyo, or the earthquakes of Christchurch provide opportunities to study isolated yet similar examples of significant threats to public life and the resulting adoption curves as tourism and visitation eventually rebound – though locals in these cities are expecting greater impacts.

***The success of openings will  
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<sup>2</sup>Lee, Chiew & Khong, 2020; Ferguson et al, 2020; Pueyo, 2020

# Survive, then thrive

For many leaders, COVID-19 is likely the most traumatic, complex challenge of their career. In visitor attractions, this challenge is accentuated by a business model almost exclusively dependent on an in person experience of a public space and in most cases, heavily exposed to tourism.

The chaos of COVID-19 is embedded in an extreme, unprecedented situation, for which the world has little experience, limited data and no playbook. In visitor attractions, the comfort of a business continuity safety blanket was a temporary shield from the realization this situation is less a short, sharp deviation from plan and more a long term threat to business as usual, which challenges the attraction core business model. Though visitor attractions typically still do well in an economic downturn, they rely on an ability to open. When the very act of opening threatens staff and visitor health, or when visitors are afraid to come, the future is uncertain.

When faced with chaotic adversity, quick and decisive action rules to establish order. Clarity of communication sets leaders apart: early and often, top down and using various channels, with the humility of known unknowns. Then begins the job of bringing the situation into focus while developing and strategizing scenarios as more information comes to light: planning for the worst,

hoping for the best and monitoring what happens in between.

For visitor attractions facing COVID-19, the initial decision to close stemmed growing chaos for staff and visitors alike. The challenge then turned to switching to remote work and a situation demanding attention to the financial threat of indefinite closure, especially holding a workforce predominately tied to onsite operations and expensive onsite overheads, dealing with the intricacies of essential onsite work such as animal care for aquariums and increased security for art museums. Longer term, the situation becomes more complex: imagining scenarios of when reopening may occur, what it might consist of and how new operational restrictions may arise - all while maintaining confidence for staff, investors or donors and the general public.

***The chaos of COVID-19 is embedded in an extreme, unprecedented situation, for which the world has little experience, limited data and no playbook***

'Survive then thrive' is a framework to lead through the COVID-19 crisis in visitor attractions, a way to manage the order of execution of focus, activities and decisions as the situation unfolds.



### 1. Assess

*Leadership team*

Calmly assess government advice and news updates. Bring the leadership team together, pull business continuity plans, determine a response action and begin intense communications.

### 2. Respond

*Board*

Enact continuity plans, including closures and limitations, travel restrictions and work from home. Consider impacts and communicate accordingly to staff and public alike using clear top down communication.

### 3. Simulate

*Finance and insights teams*

Analyze impacts to date and begin simulation of various future scenarios. Implement monitoring to carefully track performance against scenarios, with actions at hand.

### 4. Manage

*Management*

Govern ongoing actions across various functions as the situation develops, monitoring closely. During closure, turn to alternative mechanisms for visitor experience where possible.

### 5. Rise

*Management*

Once the situation eases, begin scaling carefully, monitoring to determine how markets react. Growth may be slower and more volatile than prior, with new trends and patterns emerging and where old business assumptions may not be true. Carefully monitor the performance of strategies and tactics.



Above all, the organization will require sufficient financial runway to make it to the conclusion of the crisis with an ability to invest heavily in growth generation strategies within a volatile environment. For both commercial attractions accessing investment or cultural institutions drawing upon contributions from donors, it can be expected markets will be soft for a year or more as a result of this crisis and competition for investment or donations will be heightened. Thus, to thrive, organizations will need significant financial reserves on the other side of the crisis from which to drive organic growth.

Rapid time to insight is crucial in supporting data informed decisions. This is especially applicable in a situation so removed from business as usual, where the status quo simply drawing from experience is no longer sufficient to manage effectively. In a situation where every day counts, a lack of insight, delays in accessing data or confusion in interpreting it reduces a team's decisiveness, agility and innovation.

Understanding key performance indicators, the correlation of leading indicators and the interplay of various factors to visitor behavior should be a central strategic priority for every leader in order to navigate the unknown.



# Continuity in a crisis

In visitor attractions, business continuity plans are prepared for a wide range of risks<sup>3</sup> such as accidents, active shooter, animal escape, assault, crime, cyber security, extreme weather, financial crisis, fire, health (staff or visitor), illness, missing child (or abduction), natural disaster, outages, recall, spills, terrorism and other threats. In a crisis, continuity is largely about collaboration and communication, given the difficulties of attempting to plan for myriad events.

As March 2020 drew to a close, over half of all visitor attractions surveyed had formed a crisis response team for COVID-19, a near equal split of those who had planned to do so in advance of the pandemic versus those who came together on the fly. The remaining percentage were again near evenly split between those who were in the process or planning to form their committee set against those doing without. Most were by this stage communicating with staff daily.

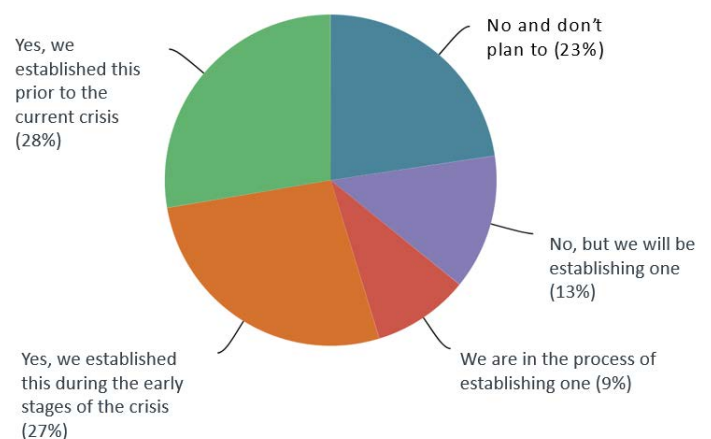
In assembling a response leadership team for COVID-19, a dual layer of crisis response provides a core leadership team to address delicate decisions with a wider committee to handle broader implications. At the core, this is likely to consist simply of the board, chief executive or executive director, chief of staff and chief financial officer. Within the wider group, the management team

<sup>3</sup>Contact IAAPA for a copy of the Crisis Communications Plan template



*The severity and scale of the COVID-19 crisis goes beyond immediate business continuity*

## Visitor attractions crisis response team status as at March 2020



**SURVEY results are based on a Dexibit pulse of over 200 visitor attractions in March 2020 (respondents were mostly small to mid sized museums in North America).**



will require input from finance, legal, human resources, marketing, operations, visitor services, security and technology, together with data and insights if a separate function. By design, communication methods should be remote suitable, including video conferencing for daily situation reports and meetings, cloud based channels for live updates and collaboration plus digital means for communicating with shareholders or other stakeholders, staff and guests. Ensure these teams are well informed with data for decision making, about the COVID-19 crisis itself and the attraction's performance.

The severity and scale of the COVID-19 crisis goes beyond immediate business continuity. The impact of being closed for a quarter or more and the ongoing suppression of visitation may eventually require most visitor attractions to abandon their original financial plan in favor of cash flow management, while shaping a new strategy for a world markedly changed by the virus and emerging strategic priorities that ensure financial health, business model innovation and ways to continue engaging with visitors.

Advisors and stakeholders should be consulted as soon as possible under business continuity management, including legal, insurance (such as loss of income and travel), lenders, landlords and lobbyists. From a legal standpoint, seek to understand the liability and responsibilities for health and safety, benefits for wage and contract workers and privacy management (for example, during contact tracing for known cases). Legal opinion should include the assessment of government measures, force majeure interpretation or negotiation position regarding the coverage of commercial rent, rates and other facility costs during lockdown for reduction or suspension.



#### **CONTINUITY: Priority metrics**

- Cash on hand, pending accounts payable and receivable, burn rate at full operation versus closure
- Unrecognized or at risk revenue from advance pass bookings and membership
- Minimum visitorship and spend to justify opening at full capacity and limited operations



## STAFF COMMUNICATIONS

Frequent, clear and human communication is the most important aspect of leadership in a crisis.

Communicate organization wide, early and often, via multiple channels such as live video conference and an email newsletter - choose settings which are both formal and informal. Aim for a regular, scheduled timetable to provide stability and certainty during such a disruptive time, such as a weekly update.

To instill confidence in leadership and provide continuity for a long running situation, involve multiple representatives from the leadership team in these updates. For example, have your technology lead provide an update on work from home facilities and a marketing lead provide positive stories around market engagement. Offer an abundance of information and access to data, helping your team interpret it. Match who speaks with the severity and importance of the message in both staff and public domains and set clear boundaries for staff on what information is public and how to respond when faced with questions from others, including the media.

In messaging, be humble to the unknown and demonstrate the value of being a learner in such an uncertain situation, rather than feel the need to know all the answers. Embrace rather than shy from the gravity of the situation. Openly address mental health and emotional impacts by setting the example that 'It's OK not to be OK' - be scared, but not scary.

To help staff manage their own nerves, offer to be their source of important news updates and connect staff with external information such as government aid. Provide an extended amount of time and encouragement for questions.

During this time, it is inevitable difficult decisions will need to be made and communicated with staff. To prepare for such, explain in advance why and how important decisions will be made (such as reopening) and provide a framework under which these will take place. Hint at what decisions may be upcoming to avoid surprise. Even in the most difficult of situations, offer hope with the message that the team are in this together and will prevail.

## CLOSURE POLICIES FOR ADVANCE REVENUE

Faced with significant and indefinite closure - advance pass, group bookings, venue hire and members will require special messaging with policies which balance cash flow versus loyalty and churn risk. Email marketing can be used to address bookings in bulk, while services teams should reach out in person to larger groups or venue hires in order of nearest schedule and to memberships in order of renewal date. Prior, check consumer protection legislation and donation tax regulations in your region. Failure to assess and communicate policy may result in brand damage or even liability.

### For advance passes

Closure policies can comprise one or more of:

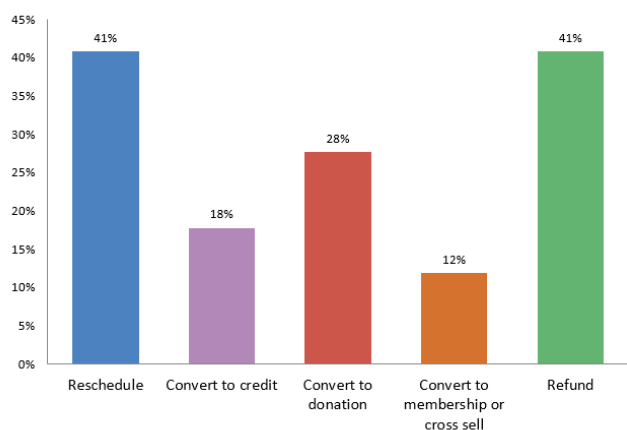
1. Reschedule (determine minimum date)
2. Convert to credit (unscheduled pass)
3. Convert to donation
4. Convert to membership or cross sell
5. Refund

### For memberships

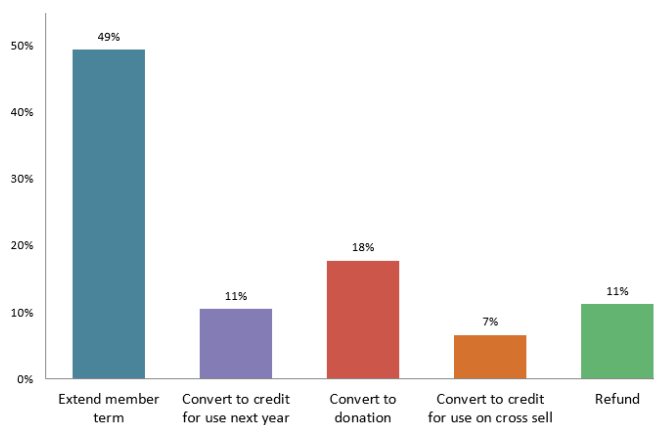
Closure policies can comprise one or more of:

1. Extend member term (determine extension)
2. Convert to credit for use next year
3. Convert to donation
4. Convert to credit for use on cross sell
5. Refund

### Advance pass consumer policy



### Membership consumer policy



# Tactical response

Data is an imperative to navigate management of this crisis. In assessing the impact of COVID-19 to date, it is recommended to evaluate both the reductions in visitation as set against a timeline of events relating to tourism activity (such as border restrictions to tourists originating from China, or Europe) plus the reductions in visitation correlated with outbreak, epidemic and pandemic status events. Insight from these two views will help inform likely impacts to demand following reopening until the eventual return of life as usual. In addition to the residual value between forecast versus actual, the difference between year on year growth rates taken on a weekly basis can also be used to understand changing demand trends.

Using machine learning, forecasts can be used to quickly calculate lost visitation and revenue in assessing the impact of COVID-19 prior to closure and the ongoing effect of closures of various durations. This data can be used for financial analysis, insurance claims and stakeholder reporting, such as to shareholders or funders. It is likely any reopen date will be a moving target and require the ability to rapidly reproduce new analysis ongoing opportunity costs.

## CLOSURE RAMIFICATIONS

Though closure is not necessarily an unusual event in itself, doing so for lengthy and indefinite periods is extraordinary. Given the quick evolution of the COVID-19 situation, communicating an indefinite closure may be more favorable than communicating a specific date and then needing to keep shifting the goalpost.

Closure communications are best distributed by all and any channels: onsite channels, email databases, website notices, social media and even via press release. This should include any special circumstances of closure and information on advance pass, group booking and membership policies, including how the public should pursue enquiries.

It is likely security will need to be increased, especially given heightened social pressures which represent a security risk. For some venues, a skeleton staff may be required to care for the premises or collections during closure and in some regions, requiring confirmation of this workforce as an 'essential service' during lockdown and special measures to ensure physical distancing, hygiene procedures and supply chain surety.



In particular for zoos and aquariums requiring animal care, special attention needs to be taken given the unknown risk of transferring COVID-19 to other species such as primates. Venues with grounds available to the public may need to consider whether these need to be blocked from the public, especially those containing facilities such as playgrounds.

For staff transitioning to work from home, urgent technology preparations need to be made to ensure bandwidth for remote access via VPN, switchboard diversions, mobile device and laptop issue, the provision of video and collaboration tools and the addition of residential IP addresses to protected networks or analytics instrumentation. If appropriate, staff could be invited to take home office equipment such as monitors and chairs to prepare for a long term work from home setup, controlled by an asset log. Staff may need assistance with procuring a suitable internet connection and time to adjust their homes and households, including flexibility for those caring for others or with children out of school. Employees travelling at the time should be assisted to return home immediately and others may desire to relocate with family ready for a longer lockdown. For those retained in roles unsuitable for remote work, special projects or professional development can be used to create purpose if these workforces can be retained.

During lockdown, cost savings can be found in powering off lighting and air conditioning (except in collections, server rooms, animal holding areas or other facilities requiring environment control).

#### **TACTICAL RESPONSE: Priority metrics**

- Impact to date in visitorship, revenue and other business model elements such as membership or season pass conversion, renewal and churn
- Likely ongoing impacts to visitorship and revenue from ongoing closures to best, worst and most probable scenarios of reopening
- Runway in months and net burn per month at current staffing levels

### **HEALTH AND SAFETY UNDER CLOSURE**

For essential staff required to work onsite, measures will be required to protect health and safety. These include physical distancing, strict and frequent handwashing and sanitizing procedures, additional cleaning operations, avoidance of in person meetings in an enclosed space, the use of Personal Protective Equipment (PPE) if advised and handling of inbound goods. In large facilities, distancing measures could include the use of separate, dedicated restrooms and break areas where possible. Although some site operations may be required, non essential procedures should be cancelled to reduce risk.

Essential services staff may wish to receive advice on reintegrating with their households, especially for those with at risk family members at home and this workforce will require special consideration for those at risk themselves. Staff members may be asked to self isolate for a period of time for those who have recently returned from travel, traced contact with a positive test result patient, experienced symptoms or where a member of their household has fallen ill.

## WORKFORCE IMPACT

The health and economic crisis will require decisions to be made around compensation and entitlements for the workforce. If viable, consider the additional support staff may require to transition into working from home in terms of time and resources, parenting with children no longer in school and suffering illness or even bereavement as a result of COVID-19. In some regions, government support may be available to assist with these measures.

Closure will require decisions on how to manage wage and contract staff who cannot fulfill the requirements of their role while the venue is closed. For staff still being paid yet unable to work onsite, staff will benefit from direction to assist with other areas of the organization, continuous improvement projects or professional development pursuits that can be done from home.

Regrettably, the longer closures continue, the more challenging cash flow becomes for organizations reliant on being open to earn revenue. Additionally, wider economic uncertainty may put other funding sources at risk, such as endowments dependent on capital market health. With such uncertainty, mitigation demands pessimism. In the face of indefinite closure, cash burn and runway inevitably lead to a question of workforce reductions, especially for roles with low knowledge risk and reentry requirements to rescale at a later date.

Whilst this decision is one most organizations will rightly try to delay for as long as possible, it is a destiny largely predetermined by cash position prior to COVID-19. However, even when action is unavoidable, there are potentially options available, depending on employment legislation and contract, which could be utilized in place of workforce reductions, in full or in part:

- Voluntary compensation cuts across the organization; potentially with a salary cap
- Reduction to a four day work week with aligned changes to compensation; even if temporary
- Utilization of annual leave balances to reduce incurred paid time off; as a liability carried
- Furlough, long term unpaid leave or sabbatical; unpaid, partially subsidized or with retained benefits
- Voluntary redundancy or retirement; potentially with financial reward

As with any workforce reduction, good process, redundancy care and support services such as resume assistance, interview coaching and reference provision are always important, no matter the situation. However, to provide a softer landing given the COVID-19 situation, extraordinary measures are worth considering, such as counselling for impacted workers or workforce redeployment partnerships with organizations required to scale up under the crisis.

For team members remaining on with the wider organization family via long term unpaid leave, if possible allow these individuals to remain connected via collaboration such as email and messaging platforms, to attend meetings and receive updates and to connect socially with colleagues via virtual means.

Whilst in more predictable times, workforce reductions are best done in one round, given the uncertainty of shutdown duration and visitation levels upon return, workforce decisions may present in multiple phases at initial closure, into extended closure and following reopening if the situation worsens.

For the majority of the team, the impact to mental health will be significant and unavoidable. Anxiety, stress, loneliness, depression and grief are all natural reactions to the pandemic. A culture of courage and vulnerability, where mental health is discussed openly, is essential. Encourage team members to check in on each other, seek help and foster empathy, in the spirit of getting through together. If not already available, consider providing an Employee Assistance Program (EAP) for anonymous mental health support. Where possible, provide virtual social support systems such as book clubs, lunch meetings and happy hours via video chat to increase connectedness.

***Following devastating earthquakes  
that killed 185 and injured  
thousands, the Christchurch Art  
Gallery Te Puna o Waiwhetū  
installed a work reading 'Everything  
is going to be alright', facing the  
hospital and mayor's office***

#### PODCAST

**Listen to former director  
Jenny Harper recount lessons  
learned in the aftermath**

**[Listen >](#)**



# Imagining different futures

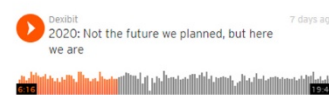
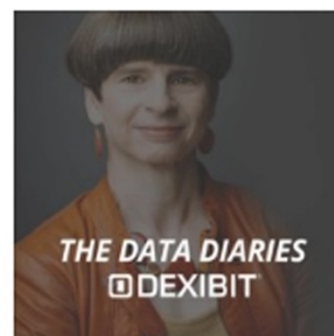
Tragedy and time give way to new realities. It is difficult to predict what the future will look like in a world burdened by COVID-19 until a vaccine becomes available, with the possibility that the natural environment may eventually curtail its path or in a difficult situation where this pandemic settles into a long term pattern of heightened activity.

The biggest questions facing visitor attractions are:

1. How long will shut downs continue for and will these be a continuing feature of the future as rolling closures, as governments use intermittent distancing?
2. Upon reopening, what will visitation and revenue look like in the face of blocked tourism, recession and suppressed public confidence, especially amongst older age groups?
3. For how long will the social fabric of society be altered? When will things return to normal?

It is increasingly likely the health and economic situations caused by the pandemic are severe and long term, with implications for public places that may last several years. Much of the ingredients for growth will be out of control of visitor attractions and largely dependent on the end games and resulting policies pursued by governments. Due to the nature of tourism, these macro political factors are relevant both at home and abroad.

*It is increasingly likely the health and economic situations caused by the pandemic are severe and long term, with implications for public places that may last several years*



## PODCAST

**Elizabeth Merritt, American Alliance of Museums, discusses what the future looks like for visitor attractions in the face of COVID-19**

[Listen >](#)



Government strategy	Expected regions	Likely ramifications
<b>Initial experimentation</b>  <i>During an initial period, citizens are provided with advice around optional and easy social distancing measures to dampen spread.</i>	Japan  Sweden	High likelihood of changing macro economic conditions should exponential growth occur in the death rate, with advice against large scale events (within and outside of venue)
<b>Flatten the curve</b>  <i>In the absence of other options, precautions such as physical distancing to slow the infection rate and delay, dampen and extend the apex of pressures on health systems above capacity to avoid death from limited resources</i>	United States  United Kingdom  Europe  Russia	Increased likelihood of rolling shutdowns for the mid to long term, ban on large scale events (within and outside of venue), capacity limitations and an unknown consumer demand curve especially for group bookings, dampened international tourism
<b>Track and trace</b>  <i>In the absence of an ability to eradicate, measures to contain such as border controls, heavy testing and contact tracing to control a reduced spread</i>	China  South Korea  Taiwan  Hong Kong  Singapore  Africa	Increased likelihood of government requirements such as temperature testing, compulsory ticketing identification for all visitors to assist trace efforts, reduced international tourism
<b>Stop and restart</b>  <i>An attempt at eradication through closed borders and heavy lockdowns early in the spread, with a plan to remain closed until resolved</i>	Australia  New Zealand	Increased likelihood of lengthier initial shutdowns, potential closure extensions for public places, lack of international tourism

Government mitigation and suppression approaches and resulting responses unfolded at an exceptionally rapid pace, which left many visitor attractions scrambling to make closure decisions, secure operations prior to lockdown and assess financial ramifications in the face of indefinite closure. Though it is likely signals around the opportunity to reopen will be less erratic, ramping to open will require an advance period. Hiring and onboarding will need to take place, supply lines reactivated and new operational policies instilled. This may be complicated by what could be sudden and unexpected government controls on operations such as capacity management, or the prospect of equally fast acting additional closures in the long term as outbreaks reappear. In addition, restrictions will have follow on effects for decisions such as whether reopening is financially viable, or whether opening days or hours require change.

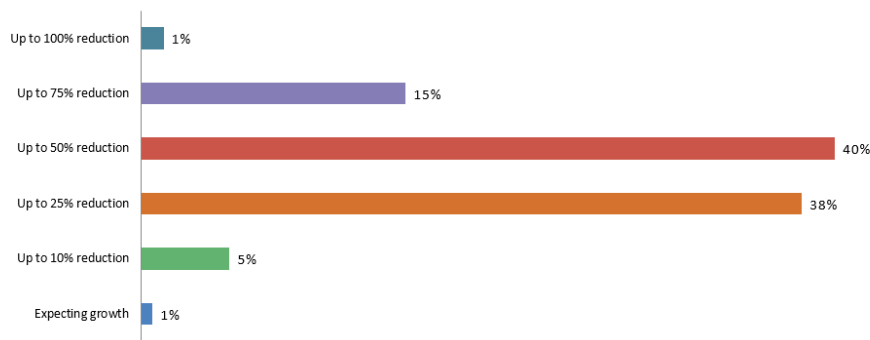
Reopening is unlikely to be a binary event which sees an instance return to normal. As a result, successfully approaching this phase requires visitor attraction teams to prepare for various situations, to understand the likely implications for their business model from interdependent factors and with the gift of time during closure, determine in advance the best course of action when faced with more change.

To prepare, scenario simulation helps to imagine what these situations could look like and prepare decision sets for finance, operations, marketing and more. These decisions could include elements such as:

- Is reopening feasible, ethical or viable?
- Should the facility be opened in entirety or in part?
- What staffing and inventory levels are required?
- When should special launches or openings be scheduled?
- What activities can take place, such as exhibitions, events or experiences?
- What operational changes need to be managed, such as capacity and queues?
- What markets should be targeted, with what acquisition cost limitation?

Scenario simulation uses a base forecast and provides an informed guess of what the future might look like in terms of key metrics such as visitation and revenue. Forecasts derived from machine learning will provide the most granular, accurate and rapid result for this study.

### Expected visitation impact to the 2020 calendar year



Simulation can be approached in three consecutive phases to stop the bleeding, recalibrate operations and spend, then refine probability for an uncertain future:

### 1. **Closure impact**

To begin, use pre COVID-19 forecasts overlaid with expected closures - both during the initial lockdown period and any possible rolling closures. Simulate the closure only impact of the worst case (lengthy and recurring shutdowns at typically busy times), best case (a single, shorter shutdown with no follow on measures) and most probable scenarios. This simulation will not address the likely impacts to visitation restrictions or behaviors post reopening.

### 2. **Scenario based**

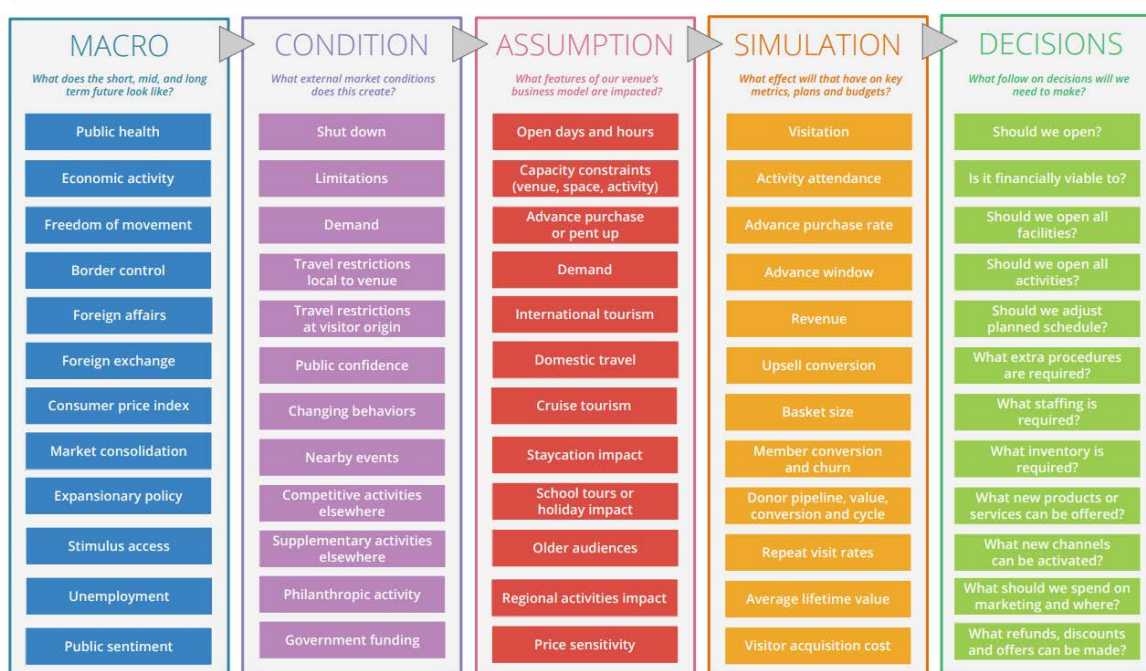
Next, imagine scenarios based on various assumptions relating to the macro analysis of health, political, economic, social and other related conditions. Based on the insights generated through machine learning models (such as the comparative impacts of nearby events) and informed by data points of the visitor profile (such as visitor origin or age), adjust the binary, scaled and calendar controls of these assumptions to create various cases.

### 3. **Assumption probability**

Lastly, unpack each assumption by creating a worst case for each. Using these, randomly simulate a volume of possible scenarios to find most probable range of cases.

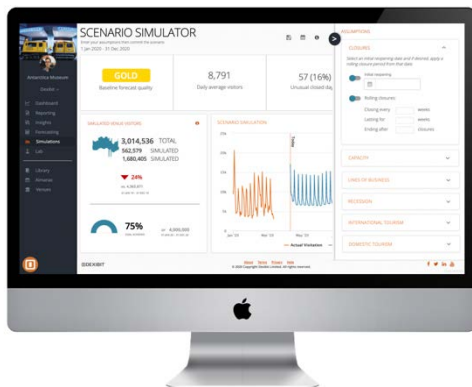
## SCENARIO SIMULATION

*This resource is specific to the COVID-19 Crisis*



RESOURCE Scenario simulation planning poster [Download](#) ›

In a crisis, it is best to plan for the worst, hope for the best and monitor what happens somewhere in between. Scenario simulation enables visitor attractions to plan in advance, the basis for an agile, proactive team in order to increase the likelihood of success during a complex time.



### Scenario simulation with Dexitbit

Together with big data analytics, Dexitbit provides scenario simulation based in machine learning to help visitor attractions quickly prepare for an uncertain future and monitor to keep a close eye on data once reopen.

For more, see [www.dexibit.com](http://www.dexibit.com).

#### **FUTURE SCENARIOS: Priority metrics**

- Visitorship, revenue and other business model elements once reopen from best, worst and most probable scenarios of operational facilities and demand
- Most probable range of visitorship outcomes from various scenarios
- Sensitivity of influential situational conditions and impactful controls



# Strategic pivots

At this stage, the most likely future consists of several months of initial closures for most venues, a continuing health crisis for at least a year, perhaps two, with the long term economic price lasting further. Set against a likely 18 month horizon with the race for a vaccine or at least effective therapies and in a fog of unknown immunity, suppression strategies will require governments to play whack-a-mole with rolling and potentially provincial shutdowns - despite pressure to reopen and refuel markets. These actions will shape the fabric of the future of society and industry conditions which will govern how visitor attractions operate. The time horizon and the significant shifts in macro economic conditions calls for more than a crisis management plan. To survive, then thrive, visitor attractions require a strategy.

In times of great economic impact to an industry, hard hit sectors traditionally reemerge structurally changed. For visitor attractions, despite the inevitable use of workforce reduction rounds to ensure continuation of the mission via cash runway, this may mean closures, mergers and acquisitions, the formations of cooperatives, privatization or deprivatization and public private partnerships or a higher degree of outsourced operation. For some, it may also require fundamental pricing policy change in the short term, from paid to free to ensure visitation or vice versa to build revenue. These sorts of exceptional decisions, reflective of the significance of the crisis to the visitor attractions industry, need to be considered proactively or be experienced reactively. Though in normal times they may present a threat, under current circumstances they may provide reprieve from a worse fate.

A level down from decisions of such significance are strategies to retain visitor engagement, visitorship and revenue opportunity. Rightly so, the greatest concerns of visitor attractions following the health and safety of staff and visitors are the financial impacts of closures and resulting layoffs, then engagement of the public. That online engagement is currently followed by an impact on visitation suggests either the lack of immediacy of that problem, given it can only be truly felt once reopening occurs and perhaps that an ability to engage visitors while closed will help mitigate this issue somewhat – though its inevitable contribution to financial impacts cannot be ignored.



*The time horizon and the shifts in macro economic conditions calls for more than a crisis plan*



Popular strategies to reseed visitation and revenue while balancing costs include:

- Staycation marketing, encouraging local and drive in audiences to enjoy their own backyards, particularly in the absence of tourists and without their own travel plans - supported by similar efforts of local tourism authorities charged with destination marketing and celebratory reopenings
- Special offers in limited pricing or exclusive benefits for unscheduled advance pass and membership purchases with a play on dreaming and planning buying behaviors for those stuck at home
- Change up of operations such as opening longer hours to spread visitation or dedicated first in hours for high value visitors (such as members or premium ticket holders) or at risk visitors (such as senior citizens and health compromised)
- Self imposed limitations such as a reduction in opening days per week to manage costs with reduced visitorship or to operate with a reduced workforce
- Rescheduling of activities and public programming such as exhibitions, experiences and events to a lower cost base, mitigated travel or logistics issues for travelling exhibits or countering government restrictions or visitor phobias (such as high scale and density cinema seating)
- Line of business additions less dependent on onsite visitation, such as ecommerce merchandise
- New channel management measures in the wake of potentially damaged or collapsed channel partners, such as online travel agencies

As reopening appears on the horizon, marketing teams will need to ready new campaigns and begin brand based advertising, early offers and exclusive experiences to create pent up demand. Once appropriate, these campaigns can begin to focus on the public's need to return to normalcy and should commence with a brand heavy messaging to emotionally connect with the hearts and minds of a quarantine weary public - to excite and inspire, to soothe and console, to educate and reflect. Closer to the time, this marketing will need to take a more tactical shift to build trust and confidence in safety, too - for a public whose habits and expectations will have changed from pre pandemic behaviors.

Though likely to be soft, reopening is still a moment worth marking with staff and families at least. For the public, the reopening of public spaces will likely also represent a celebratory milestone in the war against bugs and welcome positive news amidst the doom and gloom. Plans can be made for staff and visitors to come together in the enjoyment of a return to public life and to replenish tired spirits. This moment may be one best savored with local communities or high value visitors such as loyal members, as a special occasion just as any opening would be.

A known unknown in the simulation of opening scenarios is the demand curve. Any new opening following a build, renovation or activity launch such as an exhibition, experience or event, sees a behavior adoption curve. This will be an important factor in shaping recovery and a consideration when observing initial data sets from the first days of opening. For example, recovery may be 'V' or 'U' shaped with pent up demand that falls away before a return to growth is found.

It may have a wave or camel shape as early adopters precede mass market, or it may have a more linear curve of slow growth over time.

Unfortunately, as economies open up, secondary and subsequent rises in infections are a significant possibility especially in large markets. As a result, governments are likely to use rolling shut downs to balance economic and health priorities to keep resource demand within the capacity limits of public health. Marketing campaigns can be created with this in mind for possible reuse, extension or sequel. As reopening events likewise evolve as a series, demand curves can be anticipated to become muted over time as consumer behavior adjusts to shutdown schedules.

Price sensitivity during reopening phases needs to be a strategic and data informed decision specific to each venue and their visiting public. For some, the drive to visit will be strong enough that price increases may be possible. For others, the need to draw visitorship may be hard enough that price decreases are beneficial where elasticity is high.

#### **REOPENING: Priority metrics**

- Visitation
- Activity conversion (exhibitions, experiences and events)
- Visitor acquisition cost, changing channel attributions
- Average revenue per visit, commercial conversion rate and basket size
- Net value per visit

- Online content or access, such as digitized collections
- Online education, from simple efforts such as traditional coloring in contents through to full Science, Technology, Engineering, Arts and Mathematics (STEAM) courses for teachers needing to rework remote classrooms and parents wanting to entertain children at home or adult education classes
- Virtual tours and events, from empty in gallery curator led tours through to virtual roller coasters and performances in empty stadiums
- Social media activation, such as having the public recreate art or scenes at home
- Crowdsourced activity for those bored in isolation, such as transcribing efforts
- Donations to support essential workers or at risk community groups such as food, protective equipment or even ventilators (from zoos with animal care centers)
- Lighting up blue to show support for health workers and flying flags at half mast to show support



**ARTICLE** Searching for strategy in a washing machine (image: Cyefin framework, Edwin Stoop) [Read ›](#)

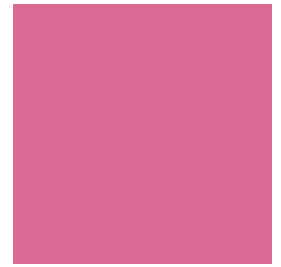
Throughout this time, the frequency and agenda of governance forums such as board or leadership meetings and communications should be reconsidered to more tightly manage the rapidly evolving situation, potentially with a split of business continuity versus business as usual as the pandemic evolves.



# Operational preparedness

While thinking long term about strategies to build visitation and revenue while continuing the mission, preparations should be underway to ready daily operations for the return of visitors under a new normal. These preparations should include health and safety measures, front line ramp up, line of business adjustments, facility management and measures to aid governments with controlling the spread of the disease. Communication of these measures to staff and visitors will help restore confidence of control.

To provide staff with a framework from which to easily understand what decisions are being made and what measures are being applied in such a fast moving environment, an alert level system is useful to describe the environmental conditions, risks and measures, such as the example below. This framework should be communicated to staff and visitors in a widespread manner with clear marking of the current alert level and required policies and procedures. A venue's framework should be based on any similar alert system adopted for civil defense or emergency management by the government and include any regional regulations or public health advice.



*An alert level system  
is useful to describe  
environmental  
conditions, risks and  
measures*



Level	Conditions	Risk	Measures ( <i>example only</i> )
5	<b>Shelter in place notice with peak health resource capacity risk</b>	<i>Extreme</i>	<ul style="list-style-type: none"> <li>• Closure</li> <li>• Onsite access only for essential staff only with approval</li> <li>• Movement notices to be carried by staff when in transit</li> <li>• Provisions for essential staff without private transport or the ability to self isolate from at risk householders or other essential workers</li> <li>• Exceptional measures for onsite staff</li> <li>• Remote wellness checks by managers</li> </ul>
4	<b>Uncontained spread with limited economic activity</b>	<i>Severe</i>	<ul style="list-style-type: none"> <li>• Closure</li> <li>• Some onsite access for non at risk staff members with approval, mandatory work from home for all others</li> <li>• Physical distancing measures for onsite staff</li> </ul>
3	<b>Heightened risk of spread with increased economic activity</b>	<i>High</i>	<ul style="list-style-type: none"> <li>• Open/closure decision review in consultation with government, experts, advisors, board and leadership</li> <li>• Visitor risk mitigations</li> <li>• Potential limitations to capacity and activities</li> <li>• Work from home where possible</li> <li>• No guests in corporate areas</li> <li>• Travel ban</li> </ul>
2	<b>Limited risk of spread with near normal economic activity</b>	<i>Medium</i>	<ul style="list-style-type: none"> <li>• Open</li> <li>• Potential limitations to some elements</li> <li>• No events of more than 50, no groups of more than 10</li> <li>• Work from home option for at risk staff (individuals or householders over 70, immunosuppressed, pregnant or under medical advice)</li> <li>• Isolation requirements for ill staff, householders or travellers</li> <li>• No physical contact such as handshakes</li> <li>• Urgent domestic travel only with approval</li> </ul>
1	<b>Containment with normal economic activity</b>	<i>Low</i>	<ul style="list-style-type: none"> <li>• Open</li> <li>• Heightened hygiene procedures and awareness</li> <li>• Isolation requirements for ill staff</li> <li>• Urgent international approval only with approval</li> </ul>
0	<b>Eliminated (usual bacterial and viral risks)</b>	<i>Normal</i>	<ul style="list-style-type: none"> <li>• Open with usual health and safety considerations</li> </ul>

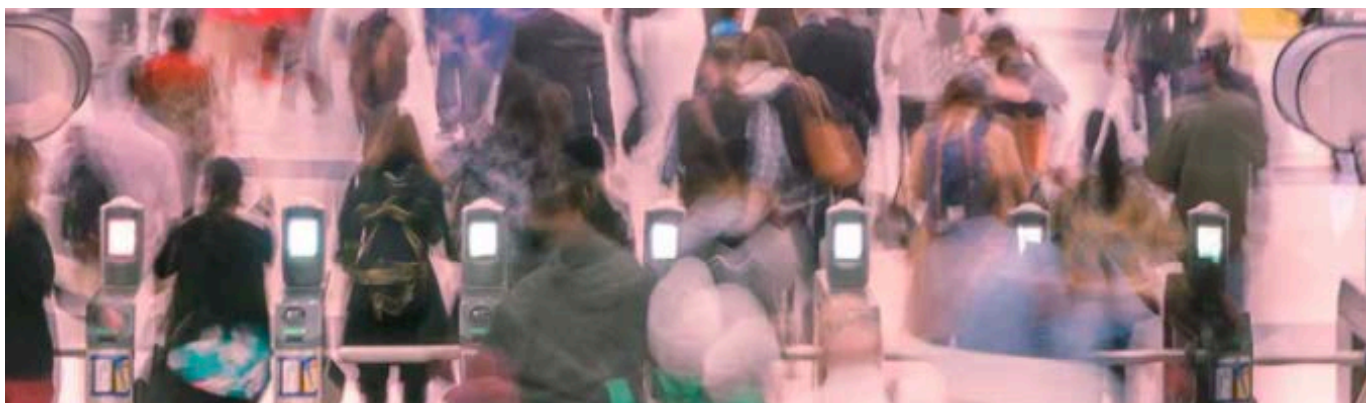
## HYGIENE

The following measures provide for staff and visitor health and safety, listed in order from simple to extreme. Applications of these measures should be within privacy legislation, health regulations, resource limitations and with consideration to cultural norms.

1. Additional cleaning with transparent communication, particularly for high touch areas such as rest rooms, railings and interactives, plus food preparation and eating areas
2. No touch dispensary hand sanitizer stations for front and back of house with hand cleaning signage in restrooms and food preparation areas
3. Regular disinfecting sanitation sprays of public areas where possible without damaging assets
4. Special policy for staff who are ill or travelling, or who have a householder ill, travelling or at extreme risk
5. Special policy for visitors who are at particular risk (for example, over 70's where a government stay home order is in place for this group)
6. Special policy for turning away visitors with visible symptoms in a non discriminatory manner or procedure for relying on a visitor health self declaration on entry
7. Physical distancing and reduced touch guidance for visitors on entry and throughout the venue, including standing in queues or participating in activities such as tours
8. Special policy requiring masks and/or gloves for staff (especially visitor facing, high contact or food preparation) and/or visitors
9. Automated staff self declaration symptom reports and wellness checks with instructions for those reporting unwell (such as a daily survey), or the potential for surveillance testing depending on the technology, availability and acceptability of sample testing by employers
10. Temperature checks for visitors on entry

Thorough and regular training and communications are paramount, especially for onboarding new staff during ramp up periods. This is especially important for the effective handling of Personal Protective Equipment (PPE) without cross contamination and for managing visitors in delicate challenging situations.

In advance of an event, venues in regions with contact tracing expectations should also develop and rehearse procedures for alerting staff and visitors if a positive case connected to the venue becomes known and if a member of staff or visitor becomes significantly unwell onsite.



## LIMITATIONS

Additional measures can be utilized to limit visitor interactions and enable greater adherence to physical distancing. These controls can also be used to address financial viability where consumer behavior is suppressed and reduced operations will help contain costs.

1. Line of business reductions, particularly around food and beverage or venue hire (reversely, some lines of business may be viable prior to the venue opening, such as parking)
2. Capacity limitations, to the venue in its entirety, particular spaces, or various activities (such as exhibitions, events or experiences, for example tours); with additional measures such as distanced seating for household 'bubbles' (where a visiting family and friends group can sit together, but are seated apart from other visitor groups)
3. Activity limitations, for example the cancellation or reduction of exhibitions, experience or events, especially those where physical distancing is impossible or improbable

## MITIGATIONS

Systems can be put in place to aid physical distancing or support government track and trace efforts.

1. Trace ticketing or visitor registration to identify every visitor coming onsite accompanied by a request for visitors to inform the venue if they develop symptoms up to 14 days following their visit, with the ability to search by a date and time window for impacted staff and visitors onsite at the time of an incident
2. Timed advance passes to control the flow of visitors through the day with reduced queues at entrance and within capacity requirements, with special provisions for advance pass issue using either a just in time scheduling confirmation or risk rating system to ease the pressures of cancelling advance passes due to rolling shut downs
3. Virtual queuing for entry, space or activity queues (such as for rides, merchandise and hospitality) to avoid the formation of physical lines, especially in enclosed spaces
4. Contactless or at least cashless payments at all point of sale areas
5. Touchless digital interactives favoring Bring Your Own Device (BYOD), movement or voice activated navigation where possible

## RESOURCING

Operations management intensity will result from a rapidly changing environment with new regulations and limitations. In particular, considerations need to account for various management aspects.

1. Ramp up will likely require the rehiring and onboarding of front of house staff, additional training for special hygiene, limitations, mitigations and readiness of the premises; requiring a project plan and timeframe estimations (governments may provide a short 48 hours notice of opening availability, however some venues may require several weeks to recommence operations)
2. Rolling shutdowns may require the sudden shut down of the venue again in future for several weeks at a time, with the expectation that this may recur; requiring a resourcing plan which can balance financial viability with ramping cycles considering the costs, efforts and timeliness for resourcing
3. Predictions using traditional estimations will not be applicable given the unprecedented operating environment - instead, scenario simulation and close monitoring will help identify a range of probably futures, with close monitoring of metrics narrowing likely scenarios and machine learning used to quickly adapt to new realities
4. Changes to opening days and hours may require operational adjustments such as changes to rostering mechanisms or overtime allowances
5. Inventory and ordering levels will require adjustments in line with reduced visitation and potential closures, balancing costs in storage and held stock with packaging, handling and perishables risk during potential future closures or supply line interruption
6. In countries with limited medical resources, care should be taken to avoid or reduce the consumption for purposes outside of health and safety, such as the use of masks and gloves for conservation efforts
7. Later in the piece once allowed by government decree, clusters of regional events such as conferences and concerts postponed and concentrated into a tight event season may unusually influence visitation trends

## DATA

Throughout the crisis, the use of data and analytics is imperative to provide leaders with rapid, trustworthy and insightful context to inform decisions, particularly with modeling capability for scenario simulation and monitoring.

For organizations with an inflight data analytics program, this situation may rapidly and repeatedly change the data program's priorities from business as usual to focus on future preparation or situation reports. For those without a current data effort, immediate and urgent efforts should be made to implement basic data provenance, reporting and forecasting, especially for organizations with reduced staffing levels where automation becomes a priority.

Depending on limitations, measures and emerging needs, new requirements such as capacity management may arise to assist strategy and operations management through the crisis.





## ABOUT DEXIBIT

Dexibit provides big data analytics with AI for visitor attractions to predict and analyze visitor behavior, with software including forecasts, insights, dashboards and reports.

For the COVID-19 crisis, Dexibit provides scenario simulations to assess the impact to date, calculate complex future visitation and revenue levels under myriad economic conditions and monitor how situations and visitor activity unfolds to continuously inform the alignment of spend and operations.

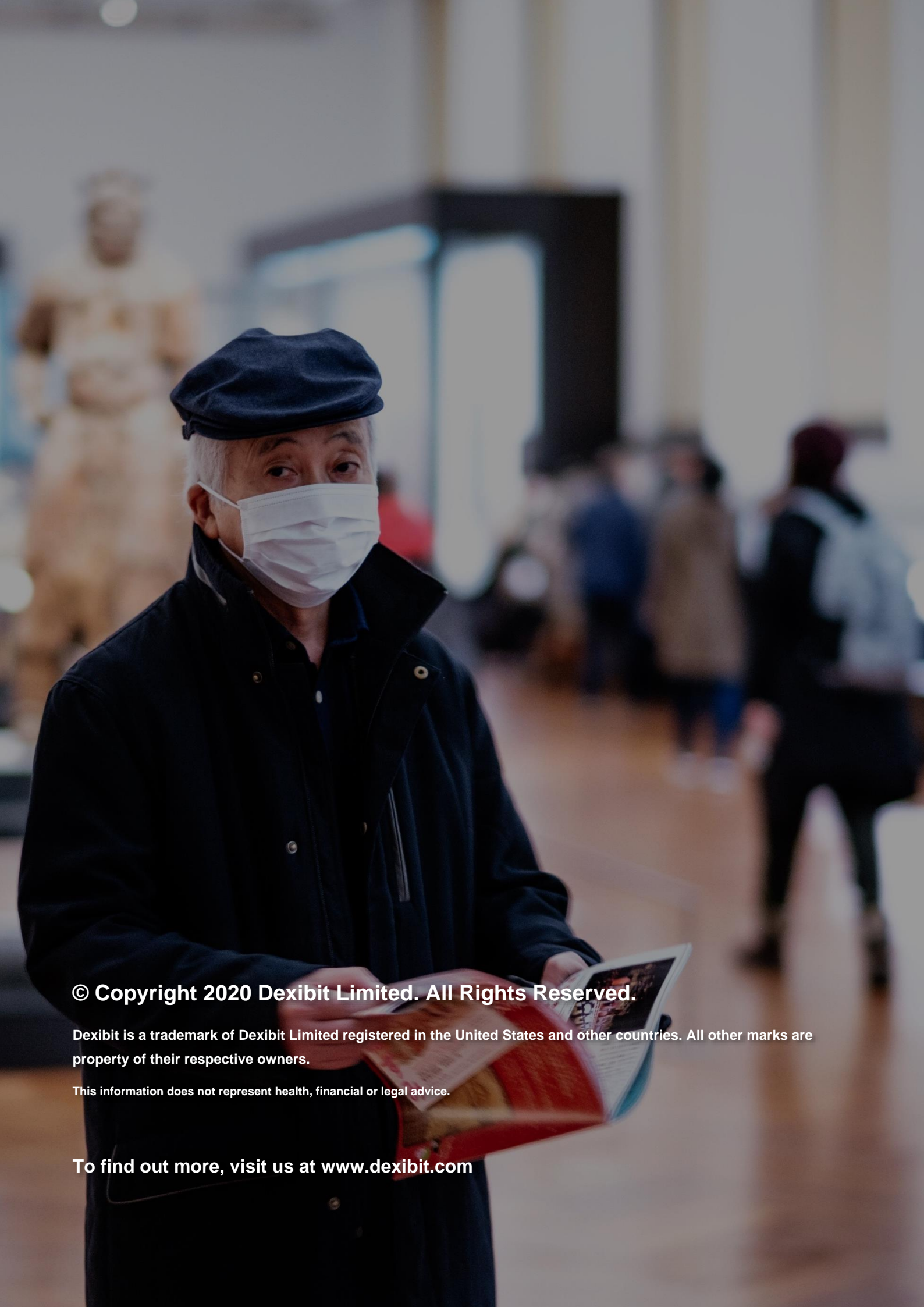
Dexibit works with cultural institutions and commercial attractions of all shapes and sizes from around the world, with offices in the United States, United Kingdom and New Zealand.

**To find out more, visit us at [www.dexibit.com](http://www.dexibit.com).**

## MORE COVID-19 RESOURCES

For more information on COVID-19 including webinars, podcasts, resources and more, see [dexibit.com/covid19](http://dexibit.com/covid19) or tune in to the Leading in Crisis podcast series at [podcast.dexibit.com](http://podcast.dexibit.com).





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